



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/935,048	08/22/2001	Larry A. Lopez	JEN-0068	7769

23413 7590 09/17/2003

CANTOR COLBURN, LLP
55 GRIFFIN ROAD SOUTH
BLOOMFIELD, CT 06002

EXAMINER

YOON, TAE H

ART UNIT	PAPER NUMBER
----------	--------------

1714

DATE MAILED: 09/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/935,048	LOPEZ ET AL.	
	Examiner	Art Unit	
	Tae H Yoon	1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-38 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____. | 6) <input type="checkbox"/> Other: ____. |

Art Unit: 1714

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-6, 10-13, 16, 17, 21, 23, 24, 26-28, 32-34 and 38 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Yuhda et al (US 6,063,832).

Yuhda et al teach a dental cement composition and method of setting thereof in abstract. Said composition comprises 5-40 wt.% of a polymerizable monomer and 30-90 wt.% of metal chelate-forming inorganic powder (col. 5, lines 12-21). Various cement (metal chelate-forming inorganic) powders such as calcium silicate (which is preferred) are taught at col. 4, line 62-64. The use of a photoinitiator is taught at col. 5, lines 22-53. One-pack and two-pack components are taught at col. 6, lines 60 to col. 7, line 11. The use of about 40 wt.% of water (aqueous cement solution) is taught in the reference example 2. The recited "up to about 50 weight percent" in claim 10, for example, encompasses 0 weight percent. Thus, the instant invention lacks novelty.

Art Unit: 1714

Claims 1-13, 16, 17, 21-34 and 38 are rejected under 35 U.S.C. 103(a) as obvious over Yuhda et al (US 6,063,832) and Torabinejad et al (US 5,769,638).

The instant invention further recites Portland cement over Yuhda et al who teach calcium silicate cement. Said calcium silicate cement is well known in the art as a Portland cement which is used in dental composition as taught by Torabinejad et al, table on col. 8.

It would have been obvious to one skilled in the art at the time of invention to utilize the art well known Portland cement of Torabinejad et al in Yuhda et al since Yuhda et al teach employing calcium silicate cement which encompasses Portland cement.

Claims 1-6, 10-13, 16-21, 23, 24, 26-28, 32-34 and 36-38 are rejected under 35 U.S.C. 103(a) as obvious over Yuhda et al (US 6,063,832) in view of Buchalter (US 2,846,322), Draenert (US 4,373,217), Posey-Dowty et al (US 4,900,546) or WO 01/12129.

The instant invention further recites an antibiotic over Yuhda et al. However, the use of said antibiotic in dental or bone cement composition is well known as taught by Buchalter (col. 3, lines 1-8), Draenert (col. 7, lines 8-17), Posey-Dowty et al (col. 2, lines 27-32) or WO (page 11).

It would have been obvious to one skilled in the art at the time of invention to utilize the art well known antibiotic of Buchalter, Draenert, Posey-Dowty et al or WO in

Art Unit: 1714

cement compositions of Yuhda et al since the use of an antibiotic in dental or bone cement composition in order to prevent an infection is a routine practice in the art.

Claims 1-6, 10-17, 21, 23, 24, 26-28, 32-35 and 38 are rejected under 35 U.S.C. 103(a) as obvious over Yuhda et al (US 6,063,832) alone, or in view of Sakuma et al (US 6,221,931) or WO 01/12129.

The instant invention further recites employing a filler over Yuhda et al who teach various fillers. However, the use of a mixture of fillers in a dental composition in order to adjust the physical properties is a routine practice as taught by Sakuma et al (abstract) and WO (page 10).

It would have been obvious to one skilled in the art at the time of invention to utilize calcium silicate and other art well known filler in Yuhda et al with or without teaching of Sakuma et al or WO since the use of multiple fillers in a dental composition is a routine practice in the art.

Claims 1-6, 10, 12, 13, 16-21, 23, 24, 26-28 and 32-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/12129 and Torabinejad et al (US 5,769,638).

WO teaches dental compositions comprising 0-95 wt. % of a polymerizable, ethylenically unsaturated component, at least 50 % by weight of an inorganic calcium-containing compound, an initiator and a radiopaque/high refractive index material such as calcium silicate at pages 8-10 wherein one pack and two pack systems are also

Art Unit: 1714

taught. WO also teaches employing an antibiotic at page 11. Said inorganic calcium-containing compound and calcium silicate meet the instant hydraulic cement.

Thus, the instant invention lacks novelty.

Claims 1-10 and 12-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 01/12129 and Torabinejad et al (US 5,769,638).

The instant invention further recites Portland cement over an inorganic calcium-containing compound and calcium silicate of WO. However, Portland cement is the art well known inorganic calcium-containing compound and calcium silicate being used in dental compositions as taught by Torabinejad et al, table on col. 8.

It would have been obvious to one skilled in the art at the time of invention to utilize the art well known Portland cement of Torabinejad et al in WO since WO teach employing a calcium-containing compound and calcium silicate which encompass Portland cement.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H Yoon whose telephone number is (703) 308-2389. The examiner can normally be reached on Mon-Thu.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Application/Control Number: 09/935,048

Page 6

Art Unit: 1714

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Tae H Yoon
Primary Examiner
Art Unit 1714

Thy/September 15, 2003